

Rationalizing the Denominator

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Simplify.

$$1) \frac{\sqrt{16}}{\sqrt{12}}$$

$$2) \frac{\sqrt{5}}{\sqrt{2}}$$

$$3) \frac{\sqrt{5}}{3\sqrt{2}}$$

$$4) \frac{5\sqrt{5} + 5}{3\sqrt{5}}$$

$$5) \frac{4 - \sqrt{2}}{2\sqrt{13}}$$

$$6) \frac{3 + \sqrt{2}}{\sqrt{3}}$$

$$7) \frac{4\sqrt{3}}{2 - 3\sqrt{3}}$$

$$8) -\frac{5\sqrt{3}}{\sqrt{2} - 4\sqrt{5}}$$

$$9) \frac{5\sqrt{3}}{4 + \sqrt{3}}$$

$$10) \frac{3\sqrt{5} - \sqrt{3}}{-3 - \sqrt{3}}$$

$$11) \frac{\sqrt{2} - 3\sqrt{3}}{4 + 3\sqrt{2}}$$

$$12) \frac{\sqrt{3} + \sqrt{2}}{2 - \sqrt{3}}$$

Answers to Rationalizing the Denominator (ID: 1)

$$1) \frac{2\sqrt{3}}{3}$$

$$2) \frac{\sqrt{10}}{2}$$

$$3) \frac{\sqrt{10}}{6}$$

$$4) \frac{5 + \sqrt{5}}{3}$$

$$5) \frac{4\sqrt{13} - \sqrt{26}}{26}$$

$$6) \frac{3\sqrt{3} + \sqrt{6}}{3}$$

$$7) \frac{-8\sqrt{3} - 36}{23}$$

$$8) \frac{5\sqrt{6} + 20\sqrt{15}}{78}$$

$$9) \frac{20\sqrt{3} - 15}{13}$$

$$10) \frac{-3\sqrt{5} + \sqrt{15} + \sqrt{3} - 1}{2}$$

$$11) \frac{-4\sqrt{2} + 6 + 12\sqrt{3} - 9\sqrt{6}}{2}$$

$$12) 2\sqrt{3} + 3 + 2\sqrt{2} + \sqrt{6}$$